# Podium Pro Audio

## Model PP1203A

## 12” 2-Way Self-Powered Speaker

## User’s Manual

**Podium Pro Audio**

Audio at its highest level

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### *INTRODUCTION*

**Podium Pro Audio** self-powered loudspeakers are a high performance yet economical source of portable live sound reinforcement. Applications include speech, vocals, stage monitor and music playback. Used in accordance with the information provided this product will give years of trouble free use.

### *PP1203A FEATURES*

- Rugged, light weight ABS construction.
  - Built-in handle makes setup/teardown easy.
  - Rubber feet for added stability.
  - Feet drop into built-in stacking cups for secure stacking.
  - Perforated metal grill.
  - Built-in 1-½” (38mm) pole mount socket.
- 12” steel basket woofer.
  - High temperature woofer voice coil.
- Titanium diaphragm horn loaded tweeter.
- 600 Watt peak power amplifier.
  - Built-in MIC/LINE mixing capability.
  - Bass and Treble controls.
  - Line level and dynamic microphone inputs.
  - Buffered and balanced loop through allows linking any number of speakers.

### *BEFORE YOU BEGIN*

- Read these instructions.
- *Follow* these instructions.
- Heed all warnings.
- Do not use where the speaker may get wet.
- Avoid placing the speaker in direct sunlight.
- Never place this speaker in close proximity to a heat source such as a radiator, stove or heater vent.
- Never defeat the polarizing or safety ground on the AC cord.
- Be certain all equipment is OFF before making or breaking connections.
- Always lower the volume control to minimum (full counter-clockwise) before turning speaker ON or OFF.
- Never attempt to connect a power amplifier’s speaker level output to the PP1203A’s inputs.
- Clean only with a damp (not wet) cloth.
- Refer all service needs to qualified personnel. There are no user serviceable components inside.



### *TROUBLESHOOTING*

| Symptom | Likely Cause | What To Do |
|---|---|---|
| **No sound.** | AC power not connected or no AC power. | Verify the presence of AC power. |
| | Power switch off. | Turn speaker on. |
| | AC fuse blown. | Replace AC fuse (5A) If new fuse also blows speaker needs repair. |
| **Speaker is ON but no sound.** | No input signal. | Verify signal present at input connector(s). |
| | Input level set too low (full counter-clockwise). | Turn LINE LEVEL up (clockwise). |
| | Volume control set too low (full counter-clockwise). | Turn MASTER volume up (clockwise). |
| **Microphone connected but no sound from microphone.** | Microphone requires phantom power. | Change to a Dynamic Microphone or add a microphone preamp that provides phantom power. |
| | Defective microphone. | Repair or replace microphone. |
| | Defective microphone cable. | Repair or replace cable. |
| **Sound is distorted even when volume is low.** | The source level is too high, overloading the LINE IN. | Turn the LINE LEVEL down (counter-clockwise) and/or reduce source level. Raise the MASTER volume (clockwise) to restore desired loudness. |
| | AC line voltage too low. | Correct AC circuit fault. |
| | Source signal is distorted. | Correct source fault. |
| **Excessive hiss in system.** | Improper gain settings. | Lower MASTER volume. Then *increase* LINE LEVEL and/or MIC LEVEL to restore desired loudness. |
| **Hum or buzz level rises and falls when volume level is raised or lowered.** | Source has faulty safety ground. | Restore safety ground connection or repair source equipment. |
| | Faulty cabling between source and speaker. | Repair or replace cable. |
| **Constant hum or buzz unaffected by volume setting.** | Faulty safety ground connection. | Restore safety ground. |
| | Induced from AC cords. | Re-route AC power cables away from the audio interconnect cabling. |
| | “Ground loop” (circulating ground current). | Break (lift) the *audio* ground using an XLR/F to XLR/M adapter designed for this purpose. Connect between the source and speaker. |
| | Excessive length unbalanced cable from source. | Use balanced cables whenever possible. Use a Direct Injection Box (DI Box) to convert un-balanced sources to balanced. |
| | Improper gain structure. | *Increase* source and/or microphone output level and *decrease* speaker LINE IN and/or MIC INPUT level(s). |

### *PP1203A SPECIFICATIONS*

System Description: Self powered, ported 12” two-way
Frequency range (-10dB): 25Hz - 20kHz
Maximum acoustic output level: 122dB
System power rating: 300 Watts (program material)
600 Watts peak.
TREBLE control range: ±12dB @ 12kHz
BASS control range: ±12dB @ 80Hz
Power requirements: 110VAC, 50/60Hz, up to 5A
Enclosure: ABS plastic
Weight: 43 lb. (19.5kg)

## WARNING

### *PROLONGED EXPOSURE TO HIGH SOUND LEVELS*

**Podium Pro Audio** PP1203A loudspeaker is capable of generating sound pressure levels (SPL) sufficient to cause permanent hearing damage to performers, production crew and audience members. Caution must be taken to avoid prolonged exposure to SPL levels in excess of 90dB. For example: Always place the speakers in such a manner that no audience members or personnel are continuously exposed to sound levels in excess of 90dB.



### *CONNECTIONS AND CONTROLS*

**Figure 1**

① **MASTER** This control adjusts the loudness of this speaker. It has no effect on **LINE OUT**①.

② **MIC LEVEL** This control adjusts **MIC INPUT**② level independent of **MASTER**①, **TREBLE**③, **BASS**④ and **LINE LEVEL**⑤ controls.

③ **LINE LEVEL** This control adjusts **LINE IN** ⑦ level independent of **MASTER**①, **TREBLE**③, **BASS**④ and **MIC LEVEL**② controls.

④ **TREBLE** This control adjusts ±12dB at 12kHz. It has no effect on **LINE OUT**①.

⑤ **BASS** This control adjusts ±12dB at 80Hz. It has no effect on **LINE OUT**①.

⑥ **MIC INPUT** This input accepts either XLR or ¼” PHONE plug, balanced or unbalanced. Do not use XLR and ¼” PHONE inputs simultaneously.

⑦ **LINE IN** This input accepts balanced or unbalanced XLR connection. It also accepts one (mono) or two (stereo) RCA phono connectors. Stereo signals are mixed to mono. Do not use both XLR and RCA inputs simultaneously.

⑧ **LINE OUT** Use this output to link multiple speakers to a single source. **LINE OUT** is the sum of the **MIC INPUT**② and **LINE IN**⑦, **MASTER**①, **TREBLE**③ and **BASS**④ controls have no effect on **LINE OUT**.

⑨ **POWER** LED lights green when the speaker is connected to AC power and the **POWER**⑨ switch is ON.

⑩ **CLIP** LED lights red when the power amplifier is overdriven. Do not operate the speaker at a level that causes continuous illumination of this light.

⑪ **POWER** ON/OFF Switch.

⑫ **AC 110V 50/60Hz** IEC power cord connector and AC fuse. The AC fuse and a spare are located under the cover directly above the AC plug.



### *INSTALLATION*

**Podium Pro Audio** speakers are intended for portable applications where the speakers will be placed directly on the stage floor or mounted on a suitable speaker stand.

**VERY IMPORTANT:** This product is ***NOT*** intended for permanent installations. Such installations must follow rigorous standards, including cable or chain rigging for safety. No rigging anchor points are provided and any attempt to modify the enclosure for this purpose will weaken the structure. Therefore, any overhead placement requiring rigging cannot be considered safe.

**FLOOR PLACEMENT:** Speakers should be placed in a secure, dry and level location. Be sure to cover or tape down any cabling that crosses a traffic lane. Two speakers can be safely stacked. The feet of the top speaker will engage cups designed into the top of the bottom speaker. Do not attempt to stack the PP1203A more than two high. More than two speakers create a tipping hazard.

Try to place the speakers between the microphone(s) and the audience. This will minimize acoustic feedback.

**STAGE “FOLDBACK” MONITOR:** Place the PP1203A on its side, along the front edge of the stage aimed toward the performers. Exact placement is strongly influenced by type and placement of the microphone(s).

**STAND MOUNTING:** **Podium Pro Audio** speakers are compatible with standard 1-⅛” (38mm) stands.

***Tip:*** Sound quality and coverage area are best when the tweeter is between 2 to 4 feet above the audience ear level.

- Speaker stands must only be used on smooth level surfaces.
- Be certain you select a stand rated for *at least 50lb*. Contact your dealer for recommendations.
- **NEVER MOUNT MORE THAN ONE SPEAKER ON A STAND.**
- Do not attempt to mount the speaker on a stand without an assistant.
  1. Mount the speaker on its stand *prior* to making any electrical connections.
  2. Check that the set screw in the speaker base is backed out enough to clear the stand post.
  3. After placement, verify that the stand post is fully seated in the speaker base.
  4. Tighten the set screw (by hand) to lock the speaker in place. Failure to do so may result in injury or equipment damage.
- Route and secure all cabling such that there are no tripping hazards. Use gaffer’s tape or other retaining system liberally.
- Any cabling which crosses a traffic lane *must* be covered or taped down.
- Add weight (i.e. sandbags) to the base of the stand for added stability. In a windy outdoor location this is vitally important!



### *AC POWER DISTRIBUTION*

It is very important to provide adequate AC power to each speaker in the system. Performance of the PP1203A may be degraded if the AC voltage drops more than five volts. The length of the run and the number of speakers connected dictate the appropriate gauge AC cord (extension cord) to use. Use the following table to establish the correct gauge AC cord to use.

**CAUTION** *Never* connect more than three PP1203A speakers to a single AC cord run. If more than three speakers are used add additional AC cords *in parallel* as needed.

| Cord Gauge | ONE PP1203A | TWO PP1203A | THREE PP1203A |
|---|---|---|---|
| **16** | up to 100’ | up to 60’ | up to 30’ |
| **14** | up to 175’ | up to 100’ | up to 60’ |
| **12** | up to 300’ | up to 150’ | up to 100’ |

### *SIGNAL DISTRIBUTION*

**Podium Pro Audio** speakers can accept either *balanced* or *unbalanced* line level sources and/or microphones.

- A balanced interconnect is a three conductor system. Two inner wires carry the audio signal differentially (opposite phase) and the third wire is for ground reference and shielding only.
- An unbalanced interconnect is a two wire system wherein the center conductor (aka “HOT”) carries the signal and the shield/ground conductor is *also* a signal conductor.

The PP1203A will accept the three most common interconnects. XLR, ¼” PHONE and RCA. XLR are balanced. ¼” PHONE cables can be balanced or unbalanced. RCA cables are always unbalanced. Balanced interconnects provide superior noise immunity, especially for runs over 10 feet. It is recommended that you use balanced interconnects whenever possible.

### *LINKING MULTIPLE SPEAKERS*

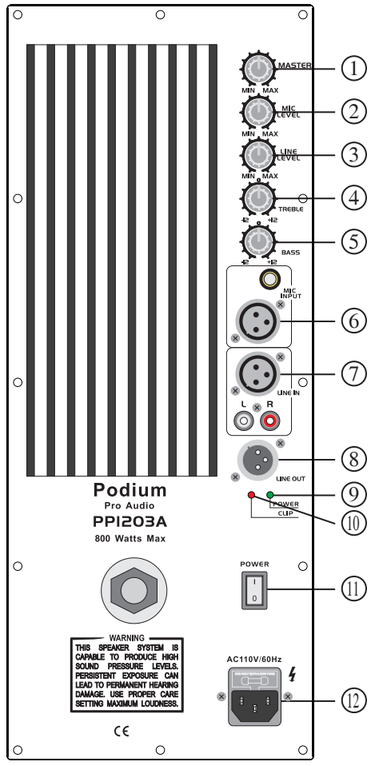
*See* **Figure 1** *for control and connection locations.*

To link (daisy-chain) multiple speakers, use an XLR interconnect from the LINE OUT⑧ connector of the first speaker to the LINE IN⑦ connector of the second speaker. The PP1203A employs a buffered, fully balanced LINE OUT circuit. Therefore there is no practical limit to the number of speakers that can be linked!

***Tip:*** To use this feature effectively it is necessary to understand exactly what LINE OUT is. It is the sum of the MIC INPUT② and LINE IN⑦. This includes their relative levels as set by the MIC LEVEL② and LINE LEVEL⑤ controls.

Note that the MASTER GAIN①, TREBLE③ and BASS④ controls *have no effect on* LINE OUT. This allows you to optimize each speaker as necessary without altering the other linked speakers.

## Functions:




1. MASTER: Control the output signal.
2. MIC LEVEL: Control the signal for MIC when using a microphone.
3. LINE LEVEL: Control the signal for LINE when using the line.
4. TREBLE: Rise or attenuate 12dB at 10KHz frequency.
5. BASS: Rise or attenuate 12dB at 80Hz frequency.
6. MIC INPUT: Use XLR or 1/4" jack connector balanced or unbalanced.
7. LINE IN: Use RCA or XLR connector balanced or unbalanced.
8. LINE OUT: Use for signal connection (Output) among other amplified speakers, when you input the signal to MIC or LINE IN.
9. Power Indicator
10. CLIP: The LED lights up when signal distortion occurs. Reduce the Volume with the LEVEL control until the CLIP LED does not light up any more, or occasionally lights up at signal peaks.
11. Power Supply Switch
12. Power Supply Input Connector: Use with power cord.

Make sure ALL of your equipment is completely OFF and lower ALL VOLUME, LEVEL & GAIN controls before connecting the speaker.

## Connections:

1. For the PP1203A you can connect a mixer or microphone directly into your speaker. To connect a microphone use an XLR or ¼" jack connector to connect to the MIC (6) input.
2. To connect a CD player, turntable or mixer use an XLR or RCA connector to connect to the LINE IN (7) input. If connecting a powered mixer use the mixers line level signals only.
3. You can LINK additional speakers using the LINE OUT(8) connection. The amplifier on your speaker will only power this speaker. If you LINK to additional speakers those speakers must be self amplified.
4. Turn on your mixer/microphones or other signal source, then turn on your PP1203A, the Power Indicator (9) will be lit. Now you can adjust your volume controls to a reasonable level.

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# PODIUM PRO AUDIO
# OPERATIONS MANUAL – PP1203A
### Professional ABS Molded Loudspeaker – 12"

## Introduction:

Congratulations on your purchase of Podium Pro Audio's amplified loudspeaker; this speaker includes the very latest technology in lightweight ABS design. The trapezoidal design was used for a more precise and accurate sound and will add increased sound definition on vocal frequencies. This state of the art speaker will give you years of enjoyment.

## Features:

- Steel basket woofer
- High wattage powered amplifier
- Stand mounting socket
- Auxiliary Line Output
- Metal Grill
- High Temperature Voice coil
- Rubber Feet
- Easy carry handles
- Stacking grooves

## Cautions:

1. All operating instructions should be read before using this equipment.
2. To reduce the risk of electric shock, do not open the unit. There are NO REPLACEABLE PARTS INSIDE. Please refer servicing to a qualified Podium Pro Audio service technician.
3. Do not expose this unit to direct sunlight or to a heat source such as a radiator or stove.
4. This unit should be cleaned only with a damp cloth. Avoid solvents or other cleaning detergents.
5. When moving this equipment, it should be placed in its original carton and packaging. This will reduce the risk of damage during transit.
6. DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
7. DO NOT USE ANY SPRAY CLEANER OR LUBRICANT ON ANY CONTROLS OR SWITCHES.
8. Make sure ALL of your equipment is completely OFF and lower ALL VOLUME, LEVEL & GAIN controls before connecting the speaker.
9. ONLY LINE LEVEL SIGNALS CAN BE SENT TO YOUR SPEAKER.

**Disregarding any of the above will void your warranty!!!!!**
**Podium Pro Audio**